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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,893

11/13/2003

Dae-Sung Han

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21171

7590

06/08/2006

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EXAMINER

COCKS, JOSIAH C

ART UNIT

PAPER NUMBER

3749

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/705,893	HAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Josiah Cocks	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,9,11,13,15-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,9,11,13,15-17 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/4/2006 has been entered.

***Claim Objections***

2. Claims 1-5, 7, 9, 11, 13, 15-17, and 19 are objected to because of the following informalities: In claim 1, line 3 and claim 9, line 10, the reference to "heating unit" should read "heating units." Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 4, 9, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,508,024 to Perkins ("Perkins").

Perkins discloses in the specification and Figs. 4-7 an invention in the same field of endeavor as applicant's invention as described in applicant's claims 1, 3, 4, 9, 11, and 13. In particular, Perkins shows a cooking apparatus (see elements illustrated in Figs. 4 and 6) having at least two heating units (87), a grill unit (76) arranged such that food laid thereon is cooked by heat from the heating units (see at least col. 6, lines 28-32), and a cover (entirety of cover 62 and base 58 regarded as the recited "cover") covering the food, defining a cooking space thereunder, and having an air ventilation structures serving as a primary conduit of air into and outlet of the cooking space when the cover is in a closed position (see at least Fig. 6 and col. 6, lines 1-14). The air ventilation structure includes opposite side portions of the cover (see upper and lower sides illustrated in Fig. 5), each with at least one air inlet hole (63), to allow inflow of the air during cooking, and the heating units (87) are disposed along a first axis at opposing ends of an interior space of the cooking apparatus (see Figs. 4 and 6 and note that units 87 are considered to be at opposing ends as recited). The air inlet holes (63) are disposed in the cover at opposing ends of a second axis that is transverse to the first axis (see Fig. 5 and note second axis extends from the lower to upper portions of that figure which is transverse to the axis extending the left to the right in this figure).

In regard to the limitation that the inlet holes do not face the heating units, this recitation is considered present in the prior art. In Perkins, the air inlet holes (63) introduce air into an interior portion of the base assembly (58). Air passing through the holes (63) passes through channels arranged upwardly by baffle plates (88). Due to the presence of the interior air deflecting structures, the holes (63) are not considered to "face" the heating units as recited (note also alternative interpretation described in § 103 below).

In regard to at least claims 3, 4, 11, and 13 note multiple outlets holes (64) that are arranged in two opposite portions of the top member of the cover as recited (see Fig. 4).

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 5 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,508,024 to Perkins ("Perkins").

Perkins discloses all the limitations of claims 5 and 15-17 (note discussion above of Perkins taken alone) with the possible exception of the specific range of outlet hole covering area and the specific temperature of the cooking space.

In regard to the recitation of the claims that the air outlet holes range from 5% to 25% of an effective area of the grill unit, as shown in Figs. 4 and 5 the air ventilation holes appear to lie within this recited range. However, even if the area of these holes is not considered to be in the recited range, it is noted that Perkins specifically discloses that the amount of ventilation is selectable to control the rate of cooking and amount of smoke exhausted (see col. 6, lines 1-13 and prior discussion of exhaust ports 43, col. 4, lines 49-68). Therefore, to have selected a specific percentage of outlet area would be simply a matter of optimizing the acknowledged exhaust port area adjustment of the prior art outlets of Perkins, which would be obtainable through routine experimentation and is not considered to be patentably distinct. See MPEP § 2144.05(II)(A).

In regard to the limitations of the claims that the air ventilation structure allows the temperature of the cooking space to be maintained below 260 degrees C., Perkins that the ventilation holes are specifically adjusted to control the temperature of the cooking space (see Perkins, col. 4, lines 51-52). Therefore, to have selected a specific temperature to maintain the cooking space at would be simply a matter of optimizing this acknowledged temperature adjustment of the prior art obtainable through routine experimentation and is not considered to be patentably distinct. See MPEP § 2144.05(II)(A).

8. Alternatively, claims 1-5, 9, 11, 13, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,508,024 to Perkins ("Perkins") in view of U.S. Patent No. 5,372,121 to Castillo et al. ("Castillo").

As noted above, Perkins discloses all the limitations of claims 1-5, 9, 11, 13, and 15-17 (note discussion of Perkins above). However, in regard to the recitation that the inlet holes do not face the heating units, while this limitation has been identified in Perkins due to the interior structure within the base portion (58) of the cover, an alternative rejection of this limitation incorporating Castillo is presented. This alternate rejection is relied upon if the recitation that the air inlets “do not face” the heating units is considered to require that a vertical plane connecting the opposing air inlets does not contact the heating unit.

As shown and described in Perkins, the heating elements (87) are understood to include traditional gas burners on a stove top (61) (see Fig. 4 and at least col. 1, lines 37-38, line 66 through col. 2, line 3 and col. 2, lines 34-39). The burners illustrated in Fig. 4 of Perkins show a central circular element and an outer circular portion with inwardly extending spokes (both unnumbered in Fig. 4). This illustration of the burner is considered to show an inner burner unit (i.e. a gas flame burner) and an outer grate portion for supporting a cooking vessel on the burner. Support for this assertion is found in the reference to Castillo. Castillo shows outer cooktop grates (24-27) with centrally located gas burners (16-19), similar to the numbered heating elements shown in Fig. 4 of Perkins. The actual flame producing burner (16-19) is located in the center of the grate (see Fig. 1 of Castillo). A person of ordinary skill in the art would understand the inner unnumbered circle of the heating elements shown in Fig. 4 of Perkins to be the inner flame producing portion (16-19) shown in Castillo. This inner flame producing portion is properly regarded as the “heating unit” recited in applicant’s claims. As shown in Fig. 6 of Perkins, at least the inner air inlet holes (63) are shown offset from the center of the heating devices (87) and thus from the centrally located flame producing heating units of the heating

Art Unit: 3749

elements (87). Therefore, a person of ordinary skill in the art would understand that at least the inner air inlet holes (63) do not face the central burner elements/heating units of the heating devices (87) as recited in applicant's claims.

In regard to the recitation of the claims that the air outlet holes range from 5% to 25% of an effective area of the grill unit, as shown in Figs. 4 and 5 the air ventilation holes appear to lie within this recited range. However, even if the area of these holes is not considered to be in the recited range, it is noted that Perkins specifically discloses that the amount of ventilation is selectable to control the rate of cooking and amount of smoke exhausted (see col. 6, lines 1-13 and prior discussion of exhaust ports 43, col. 4, lines 49-68). Therefore, to have selected a specific percentage of outlet area would be simply a matter of optimizing the acknowledged exhaust port area adjustment of the prior art outlets of Perkins, which would be obtainable through routine experimentation and is not considered to be patentably distinct. See MPEP § 2144.05(II)(A).

In regard to the limitations of the claims that the air ventilation structure allows the temperature of the cooking space to be maintained below 260 degrees C., Perkins that the ventilation holes are specifically adjusted to control the temperature of the cooking space (see Perkins, col. 4, lines 51-52). Therefore, to have selected a specific temperature to maintain the cooking space at would be simply a matter of optimizing this acknowledged temperature adjustment of the prior art obtainable through routine experimentation and is not considered to be patentably distinct. See MPEP § 2144.05(II)(A).



Art Unit: 3749

9. Claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins taken alone in view of U.S. Patent No. 5,189,945 to Hennick ("Hennick") (cited by applicant).

Perkins discloses all the limitations of claims 7 and 19 (note discussion above of Perkins taken alone) except for a pair of water tanks and a plurality of grilling pipes communicating with the water tanks.

Hennick discloses in Figures 1-17 a cooking apparatus that is considered analogous art to that of Perkins. In Hennick, the cooking apparatus includes a heating unit (2), and a grill unit having a plurality of grilling pipes (12) communicating with a pair of water (19) tanks to allow flow of water through the pipes (see col. 5, lines 17-42).

Therefore, in regard to claims 7 and 19, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the cooking apparatus of Perkins to incorporate the water tanks and grilling pipes of Hennick as these structures desirably aid in the cleaning grill components and prevent the undesirable occurrences of grease burning on the cooking surface and food sticking to the cooking surface (see Hennick, col. 3, lines 55-66).

10. Alternatively, claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Castillo to claims 1 and 9 above, and further in view of U.S. Patent No. 5,189,945 to Hennick ("Hennick") (cited by applicant).

Perkins in view of Castillo teach all the limitations of claims 7 and 19 except for a pair of water tanks and a plurality of grilling pipes communicating with the water tanks.

Hennick discloses in Figures 1-17 a cooking apparatus that is considered analogous to that of Perkins. In Hennick, the cooking apparatus includes a heating unit (2), and a grill unit

Art Unit: 3749

***Conclusion***

12. This action is made non-final. A THREE (3) MONTH shortened statutory period for reply has been set. Extensions of time may be available under the provisions of 37 CFR


1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg, can be reached at (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jcc  
June 1, 2006

  
JOSIAH COCKS  
PRIMARY EXAMINER  
ART UNIT 3749

Art Unit: 3749

having a plurality of grilling pipes (12) communicating with a pair of water (19) tanks to allow flow of water through the pipes (see col. 5, lines 17-42).

Therefore, in regard to claims 7 and 19, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the cooking apparatus of Perkins to incorporate the water tanks and grilling pipes of Hennick as these structures desirably aid in the cleaning grill components and prevent the undesirable occurrences of grease burning on the cooking surface and food sticking to the cooking surface (see Hennick, col. 3, lines 55-66).

### *Response to Arguments*

11. Applicant's arguments filed 4/4/2006 have been fully considered but they are not persuasive. As noted above, applicant's claims as now recited do not patentably distinguish applicant's invention over the prior art of record. In particular, in the primary reference relied upon by the examiner, Perkins, the burner elements (87) shown in Fig. 6 and Fig. 4 (unnumbered in this figure) are now interpreted as the heating units as recited. The entire assembly (56) including what is described in Perkins as cover (62) and base (58) is now regarded as the "cover" as recited in applicant's claims. For the reasons noted in the discussion of the prior art above, applicant's claims are not considered to distinguish over the prior now based upon this interpretation of Perkins.

Applicant does not argue against the reference to Hennick. Accordingly, this reference is considered to properly disclose that for which it has been cited.